

Bioaccumulation Model Check-In

CPG-EPA Conference Call

May 13, 2019

Agenda

- Update on model calibration
 - Current calibration and calibration targets
 - Updated plots
- Discussion of alternate calibrations

Calibrated Parameters

- Chemical-specific:
 - K_{OW} (set equal to CFT model values)
 - E_D (dietary chemical transfer efficiency)
 - Metabolic rate constants (K_M)
- Other parameters:
 - Water temperature
 - Dietary AEs for benthic invertebrates (NLOC, NLOM)
 - Weight of DEPs (RM 6 to 14.7)
 - Diet of DEPs in RM 6-14.7 and RM 14.7-Dam

Current Calibration – Dynamic Model

- Review updated plots:
 - Time-series plots
 - Updated plots by river mile
 - Empirical data
 - Steady state calibration
 - Dynamic model calibration

Calibration Status

- Lines of evidence supporting calibration:
 - Steady state model – performing well across species and chemicals
 - Benthic BSAFs
 - Dynamic model – also performing well across species and chemicals
- Considering calibration final pending:
 - Evidence from alternate calibrations indicates reason for modification.
 - Comments from EPA

Alternate Calibrations

- Will be used in report to evaluate model calibration.
- Run two ways:
 - With K_{OW} held constant (i.e., equal to CFT model values)
 - Allowing K_{OW} to vary
- Discuss process and parameters to include